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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,323	07/15/2004	Kensuke Fujii	04853.0115	7887

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EXAMINER

KRECK, JOHN J

ART UNIT PAPER NUMBER

3673

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/501,323	Applicant(s) FUJII ET AL.	
	Examiner John Kreck	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10/20/06.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8, 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

The amendment dated 10/13/06 has been entered.

Claims 1-3, 5-8, and 10-14 are pending

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims list "petroleum hydrocarbons" as belonging to the genus of "chlorinated organic compounds". This is unclear, since such hydrocarbons are not normally considered to be chlorinated; and raises questions about what other (non chlorinated) substances might fall into the genus of "chlorinated organic compounds".

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 1-3, 5-8, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaze, et al. (U.S. Patent number 5,593,888) in view of "Gardening Series Basics Choosing a Soil Amendment".

Glaze teaches the method of purifying contaminated soil comprising adding a soil improving material (unspecified "other amendments" column 15, line 40); and mixing the soil by agitation while adding microbes.

Glaze fails to explicitly disclose the nature of the amendments, and thus fails to disclose the water-absorbing properties and capability of maintaining non-swelling property and non-viscosity.

"Gardening Series" (page 3, under "Soil texture") teaches that it is advantageous to add perlite to clay soils to improve their permeability. Applicant's specification teaches that perlite inherently meets the claimed properties.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Glaze process to have included perlite as the "other amendment", in order to improve soil permeability, for example; thus resulting in the claimed properties called for in claim 1. With regards to the newly added claim limitation of "inorganic" soil improving material; perlite is an inorganic material. It is noted that the claim uses the open ended transitional phrase "comprising the steps of..." This language does not exclude other steps (such as adding sawdust). Furthermore, it is plain that the microbes (claim 2) are organic in nature. It is also observed that applicant contemplates the addition of other organic substances

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(nutrients; co-metabolites--page 11, second paragraph). Therefore the claim language is interpreted broadly, to allow for addition of organic additives.

With regards to the newly added limitations of "optionally aerating" and "gas phase rate increasing": Glaze plainly teaches aerating, which is deemed to anticipate the claim language of "optionally aerating". The "gas phase rate increasing" properties of perlite are inherent.

With regards to claim 2; Glaze apparently discloses microbes not contained by the soil-improving material.

Glaze teaches aeration as called for in claim 3.

"Gardening Series" teaches perlite as called for in claim 5.

Regarding independent claim 6:

Glaze teaches the method of purifying contaminated soil comprising adding a soil improving material (unspecified "other amendments" column 15, line 40); and mixing the soil by agitation while adding microbes.

Glaze fails to explicitly disclose the nature of the amendments, and thus fails to disclose the water-absorbing properties and capability of maintaining non-swelling property and non-viscosity.

"Gardening Series" (page 3, under "Soil texture") teaches that it is advantageous to add perlite to clay soils to improve their permeability. Applicant's specification teaches that perlite inherently meets the claimed properties.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Glaze process to have included perlite as the "other amendment", in order to improve soil permeability, for example; thus resulting in the claimed properties called for in claim 6. With regards to the newly added claim limitation of "inorganic" soil improving material; perlite is an inorganic material. It is noted that the claim uses the open ended transitional phrase "comprising the steps of..." This language does not exclude other steps (such as adding sawdust). Furthermore, it is plain that the microbes (claim 7) are organic in nature. It is also observed that applicant contemplates the addition of other organic substances (nutrients, co-metabolites--page 11, second paragraph). Therefore the claim language is interpreted broadly, to allow for addition of organic additives.

With regards to the newly added limitations of "optionally aerating" and "gas phase rate increasing": Glaze plainly teaches aerating, which is deemed to anticipate the claim language of "optionally aerating". The "gas phase rate increasing" properties of perlite are inherent.

Glaze teaches the microbes and soil-improving material separately added (see column 10, lines 36 and column 29, lines 29-30) as called of in claim 7.

Glaze teaches aeration as called for in claim 8.

"Gardening Series" teaches perlite as called for in claim 10.

Regarding new claims 11-14, see col. 24, lines 25-40, where chlorinated organics (e.g. tetrachloroethylene) and petroleum hydrocarbons (e.g. fuel oil) are disclosed.

### ***Response to Arguments***

2. Applicant's arguments filed 10/13/06 have been fully considered but they are not persuasive.

It is noted that applicant has asserted that the claim language "optionally aerating" distinguishes the claims from the Glaze reference, which (apparently) requires aerating. This is not persuasive; the claim language "optionally" is interpreted as an alternative limitation, and indicates that the claimed process may or may not include the step of aerating. Since this step is plainly taught by Glaze, the claims remain rejected. See, also, claims 3 and 8, which are read (by applicant's own admission) to require a step of aerating. The unambiguous nature of these claims negates any optional property of the aerating step: claims 3 and 8 can only be anticipated by a reference which teaches aerating. To argue that independent claim 1 defines over Glaze because Glaze requires aerating, while stipulating in dependent claim 3 that the *inventive method* requires aerating, flies in the face of reason.

See also Ex Parte Wu, 10 USPQ2d 2031 (Bd. Pat. App. & Int. 1989)

Applicant's arguments concerning the motivation to add perlite to the Glaze process are not persuasive. It is agreed that Glaze does not contemplate or suggest

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adding the "gas phase rate increasing" materials. The rejection is based on the teachings in the Gardening document that perlite is effective in improving clay texture.

Applicant's assertion that Glaze and the Gardening document teach away from each other is not persuasive: the addition of sand to the soil is not at issue.

Applicant has asserted that Glaze allegedly teaches away from "inorganic soil improving material", and cites text from Glaze in support. This is not persuasive, since Glaze explicitly teaches the use of at least one inorganic soil improving material (sand, see col. 8, line 5). It is apparent that Glaze refers to organic amendments for use as nutrients.

With regards to the teaching of the disadvantages of adding sand to clay; this compliments, rather than contradicts, the Glaze reference; which does not require adding sand to clay, as alleged by applicant. See col. 8, lines 6 and 7; and col. 12, lines 12 and 13.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the



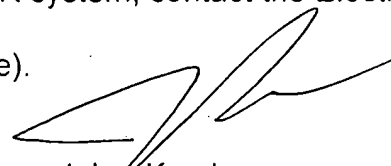
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on Mon-Thurs 530am-2pm; Fri: telework.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Kreck  
Primary Examiner  
Art Unit 3673

7 November 2006